

FIG. 10

The diagram illustrates a dual-channel receiver system. Two input signals, A and B, are received by two separate array antennas (114a, 114b). Each signal path includes a MUX (116a, 116b), a TUNER IN VSB FRONTEND (108a, 108b), and a SYNCHRONIZER (118). The output of the synchronizer is split into two paths: one goes to a BUFFER (120) and the other to a CONTROL ALGORITHM (134). The BUFFER output goes to an FFE (110a, 110b). The FFE output is multiplied by a feedback signal μ_1 and added to the original signal. The result is then processed by a DFE (114a, 114b). The DFE output is multiplied by a feedback signal μ_2 and added to the original signal. The final output is processed by a MUX (126a, 126b) and a FEC DECODER (130). The CONTROL ALGORITHM (134) receives feedback signals from the FFE, DFE, and FEC DECODER, and outputs optimization criteria (132) to the FFE and DFE.